

### **APA WORKS**

Debra Orringer, BS, MS, ACSM, AFAA, Med-X NASA KSC Fitness Center Supervisor Adapted Physical Activity Works Program

#### What is APA?

 For all practical purposes, Adapted Physical Activity IS developmentally appropriate physical education at its

finest.

### **Examples of APA**

- Equipment modification
- Altering distances
- Modifying grasps
- Varying tempo and time/pace
- Seated activities
- Simplified patterns





### Sport Examples

- Team
  - Basketball
  - Soccer
  - Softball
  - Volleyball
  - Tennis

#### Individual

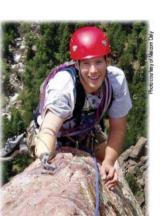
- SCUBA
- Surfing
- Skiing
- Swimming
- Bowling
- Golf
- Track / Field













### Purpose of APA Works

- Increase the availability of resources
- Reduce participation barriers



### Goal of APA Works

 Our goal is to enhance productivity, effectiveness and longevity in the KSC workforce.



## History

Program idea inception

Chief Medical Officer

Winter 2002



### History con't

- DAAWG KSC Disability Program
  Staff Meetings
- o Focus group on 3/13/03
- o Debra Orringer, lead
- Consultant retained



### Focus Group Results

- Personal Sessions
- Assistance
- HQ preferred
- Session Time



- o 2 3 times / week
- wheelchair persons fear overuse injuries
- Requested use of a LMT

### Our Approach

- Pilot program
- Establish metrics
- Medical clearance
- Liability issues

- Emergency procedures
- Staffing needs
- Funding and budget
- o obtain location



#### **Current Status**

- Space requirement
- Temporary Location
- Equipment
- Advertising and recruitment
- Internship program developed







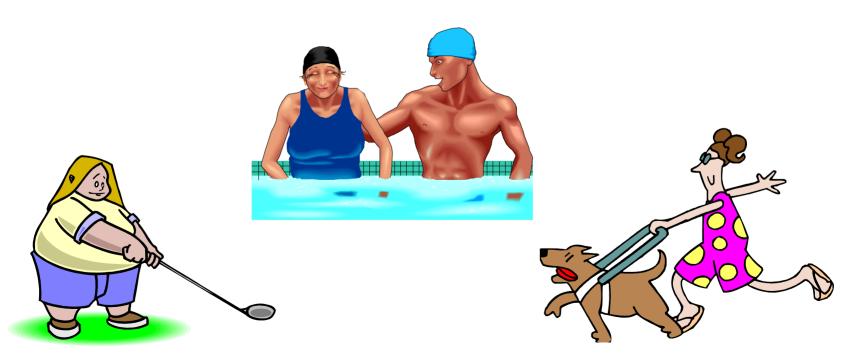
### **Next Steps**

- Increase utilization
- Model Program



### **Current Users**

 This program is growing every day as new clients begin utilizing the program.



### Russ Dyer

- Disability Auto Accident
- After APA
  - "I look forward to beginning my exercises and feel great.
  - The results speak for themselves, I am starting to run, which was my goal.
  - I feel that my life is getting back to the way it was before the crash and a lot of the reason is the help I have had from the APA program and from you, Deb and Tony.
  - The exercise program is only as good as the people administering it."



### After the accident





# Russ Dyer







### Paul Mogan



- Disability Juvenile Macular Degeneration
- Prior to APA
  - "The Fitness Centers allowed me to exercise regularly and to do strength training. My eyesight makes it difficult to keep record charts and some machines are hard for me to set up. Before I began I had poor muscle tone in arms, chest and back. I was down about my looks."

#### **David Otero**

- Disability
  - Polio, 1951.
- Prior to APA
  - "Great weakness after surgery with reduced range of motion. Looked forward to exercise after rehab to regain strength and range of motion."





#### **Donna Atkins**

#### Disability

- "Most of my physical problems are related to my birth defect, arthrogryposis.
- I had 34 operations on my hands between 1959 and 1982.
- I've also had fibromyalgia since 1980."











- Without the APA program I would probably not be doing any exercise.
- I am very self conscious about how weak I am, but Debra is very supportive, and an excellent coach.



### Raymond Sullivan

#### Disability

"In 1982, just after I got out of the Marine Corps I had a serious motorcycle accident that left me a paraplegic. After nine months in the hospital, I got out and went to school and received a B.S. in Computer Engineering. I now subcontract for United Space Alliance and work as a computer programmer at the Kennedy Space Center. I am now 46 years old."







# Raymond Sullivan







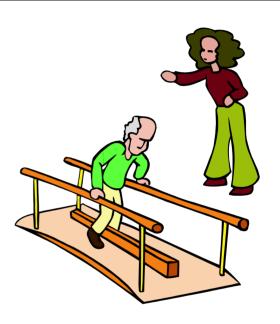
### Misc feedback

- Client with Degenerative Disc
  Disease
- Feedback regarding staff



#### Potential Users of APAWorks

- Spinal Cord Injuries
- Muscular Dystrophy
- Cerebral palsy
- Amputations
- Elderly
- Spinal Curvatures and Conditions



#### Potential Users of APAWorks

- Arthritis
- Diabetes
- Cystic Fibrosis
- Asthma
- Sensory Disorders
- Obesity







#### **APA Success**

 Sports and recreation offer the opportunity to achieve success in a very short time period; to use this success to build self-confidence and focus on possibilities instead of dwelling on what can no longer be done.

